

Athanasios Dimoulas

List of Publications by Year in descending order

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184
papers

5,463
citations

70961

41
h-index

98622

67
g-index

192
all docs

192
docs citations

192
times ranked

5655
citing authors

#	ARTICLE	IF	CITATIONS
1	Fermi-level pinning and charge neutrality level in germanium. Applied Physics Letters, 2006, 89, 252110.	1.5	532
2	Evidence for graphite-like hexagonal AlN nanosheets epitaxially grown on single crystal Ag(111). Applied Physics Letters, 2013, 103, .	1.5	251
3	Silicene: a review of recent experimental and theoretical investigations. Journal of Physics Condensed Matter, 2015, 27, 253002.	0.7	180
4	HfO ₂ high- κ gate dielectrics on Ge (100) by atomic oxygen beam deposition. Applied Physics Letters, 2005, 86, 032908.	1.5	144
5	Evidence for hybrid surface metallic band in (4 \times 4) silicene on Ag(111). Applied Physics Letters, 2013, 103, .		122
6	High-quality, large-area MoSe ₂ and MoSe ₂ /Bi ₂ Se ₃ heterostructures on AlN(0001)/Si(111) substrates by molecular beam epitaxy. Nanoscale, 2015, 7, 7896-7905.	2.8	122
7	Phase-Dependent Resistance in a Superconductor-Two-Dimensional-Electron-Gas Quasiparticle Interferometer. Physical Review Letters, 1995, 74, 602-605.	2.9	118
8	Two-dimensional semiconductor HfSe ₂ and MoSe ₂ /HfSe ₂ van der Waals heterostructures by molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	1.5	110
9	Electrical properties of La ₂ O ₃ and HfO ₂ -La ₂ O ₃ gate dielectrics for germanium metal-oxide-semiconductor devices. Journal of Applied Physics, 2008, 103, .	1.1	108
10	Modeling of negatively charged states at the Ge surface and interfaces. Applied Physics Letters, 2009, 94, .	1.5	95
11	Epitaxial 2D SnSe ₂ /2D WSe ₂ van der Waals Heterostructures. ACS Applied Materials & Interfaces, 2016, 8, 23222-23229.	4.0	94
12	Strain dependence of band gaps and exciton energies in pure and mixed transition-metal dichalcogenides. Physical Review B, 2016, 94, .	1.1	94
13	Interface engineering for Ge metal-oxide-semiconductor devices. Thin Solid Films, 2007, 515, 6337-6343.	0.8	87
14	Inorganic-organic core-shell titania nanoparticles for efficient visible light activated photocatalysis. Applied Catalysis B: Environmental, 2013, 130-131, 14-24.	10.8	87
15	Structural and electrical quality of the high- κ dielectric Y ₂ O ₃ on Si (001): Dependence on growth parameters. Journal of Applied Physics, 2002, 92, 426-431.	1.1	82
16	Massless Dirac Fermions in ZrTe ₂ Semimetal Grown on InAs(111) by van der Waals Epitaxy. ACS Nano, 2018, 12, 1696-1703.	7.3	82
17	Silicene and germanene: Silicon and germanium in the "flatland". Microelectronic Engineering, 2015, 131, 68-78.	1.1	72
18	Subnanometer-equivalent-oxide-thickness germanium p-metal-oxide-semiconductor field effect transistors fabricated using molecular-beam-deposited high- κ /metal gate stack. Applied Physics Letters, 2006, 88, 132107.	1.5	70

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19	HfO ₂ as gate dielectric on Ge: Interfaces and deposition techniques. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 135, 256-260.	1.7	68
20	Strain-induced changes to the electronic structure of germanium. Journal of Physics Condensed Matter, 2012, 24, 195802.	0.7	67
21	Direct heteroepitaxy of crystalline Y ₂ O ₃ on Si (001) for high-k gate dielectric applications. Journal of Applied Physics, 2001, 90, 4224-4230.	1.1	62
22	Complex admittance analysis for La ₂ Hf ₂ O ₇ /SiO ₂ high- ϵ_r dielectric stacks. Applied Physics Letters, 2004, 84, 260-262.	1.5	61
23	Epitaxial 2D MoSe ₂ (HfSe ₂) Semiconductor/2D TaSe ₂ Metal van der Waals Heterostructures. ACS Applied Materials & Interfaces, 2016, 8, 1836-1841.	4.0	60
24	Germanium-induced stabilization of a very high-k zirconia phase in ZrO ₂ /GeO ₂ gate stacks. Applied Physics Letters, 2008, 93, 082904.	1.5	59
25	La ₂ Hf ₂ O ₇ high- ϵ_r gate dielectric grown directly on Si(001) by molecular-beam epitaxy. Applied Physics Letters, 2004, 85, 3205-3207.	1.5	57
26	Evidence for Germanene growth on epitaxial hexagonal (h)-AlN on Ag(1 1 1). Journal of Physics Condensed Matter, 2016, 28, 045002.	0.7	57
27	Very high- ϵ_r ZrO ₂ with La ₂ O ₃ (LaGeOx) passivating interfacial layers on germanium substrates. Applied Physics Letters, 2008, 93, .	1.5	55
28	Molecular beam epitaxy of thin HfTe ₂ semimetal films. 2D Materials, 2017, 4, 015001.	2.0	55
29	Intrinsic carrier effects in HfO ₂ /Ge metal-insulator-semiconductor capacitors. Applied Physics Letters, 2005, 86, 223507.	1.5	54
30	Oxygen vacancy ordering in epitaxial layers of yttrium oxide on Si (001). Applied Physics Letters, 2003, 82, 4053-4055.	1.5	53
31	Ru and RuO ₂ gate electrodes for advanced CMOS technology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 117-121.	1.7	52
32	Electron energy band alignment at interfaces of (100)Ge with rare-earth oxide insulators. Applied Physics Letters, 2006, 88, 132111.	1.5	52
33	The role of La surface chemistry in the passivation of Ge. Applied Physics Letters, 2010, 96, .	1.5	51
34	Materials and electrical characterization of molecular beam deposited CeO ₂ and CeO ₂ /HfO ₂ bilayers on germanium. Journal of Applied Physics, 2007, 102, .	1.1	48
35	High epitaxial quality Y ₂ O ₃ high- ϵ_r dielectric on vicinal Si(001) surfaces. Applied Physics Letters, 2002, 81, 3549-3551.	1.5	47
36	Ge interface engineering using ultra-thin La ₂ O ₃ and Y ₂ O ₃ films: A study into the effect of deposition temperature. Journal of Applied Physics, 2014, 115, .	1.1	47

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37	HfO ₂ high-k dielectrics grown on (100)Ge with ultrathin passivation layers: Structure and interfacial stability. Applied Physics Letters, 2005, 87, 221906.	1.5	46
38	Conduction band offset of HfO ₂ on GaAs. Applied Physics Letters, 2007, 91, .	1.5	46
39	Mo ₂ C/graphene heterostructures: low temperature chemical vapor deposition on liquid bimetallic Sn-Cu and hydrogen evolution reaction electrocatalytic properties. Nanotechnology, 2019, 30, 125401.	1.3	44
40	Source and Drain Contacts for Germanium and III-V FETs for Digital Logic. MRS Bulletin, 2009, 34, 522-529.	1.7	42
41	Epitaxial ZrSe ₂ /MoSe ₂ semiconductor v.d. Waals heterostructures on wide band gap AlN substrates. Microelectronic Engineering, 2015, 147, 269-272.	1.1	42
42	Effects on surface morphology of epitaxial Y ₂ O ₃ layers on Si (001) after postgrowth annealing. Thin Solid Films, 2004, 468, 303-309.	0.8	41
43	Insight and control of the chemical vapor deposition growth parameters and morphological characteristics of graphene/Mo ₂ C heterostructures over liquid catalyst. Journal of Crystal Growth, 2018, 495, 46-53.	0.7	40
44	Structural evolution of single-layer films during deposition of silicon on silver: a first-principles study. Journal of Physics Condensed Matter, 2012, 24, 442001.	0.7	38
45	MBE lanthanum-based high-k gate dielectrics as candidates for SiO ₂ gate oxide replacement. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 85-88.	1.7	37
46	Germanium MOSFETs With $\text{CeO}_2/\text{HfO}_2/\text{TiN}$ Gate Stacks. IEEE Transactions on Electron Devices, 2007, 54, 1425-1430.	1.6	37
47	Observation of Surface Dirac Cone in High-Quality Ultrathin Epitaxial Bi ₂ Se ₃ Topological Insulator on AlN(0001) Dielectric. ACS Nano, 2014, 8, 6614-6619.	7.3	37
48	Very large remanent polarization in ferroelectric Hf _{1-x} Zr _x O ₂ grown on Ge substrates by plasma assisted atomic oxygen deposition. Applied Physics Letters, 2019, 114, .	1.5	37
49	Epitaxial germanium-on-insulator grown on (001) Si. Microelectronic Engineering, 2007, 84, 2328-2331.	1.1	36
50	Stabilization of very high-k tetragonal phase in Ge-doped ZrO ₂ films grown by atomic oxygen beam deposition. Journal of Applied Physics, 2009, 106, .	1.1	36
51	Surface electronic bands of submonolayer Ge on Ag(111). Physical Review B, 2013, 88, .	1.1	36
52	Electrical properties of Y ₂ O ₃ high- ϵ_r gate dielectric on Si(001): The influence of postmetallization annealing. Journal of Applied Physics, 2003, 93, 3982-3989.	1.1	35
53	Characterization of field-effect transistors with La ₂ Hf ₂ O ₇ and HfO ₂ gate dielectric layers deposited by molecular-beam epitaxy. Journal of Applied Physics, 2006, 99, 024508.	1.1	35
54	Degenerate electron gas effects in the modulation spectroscopy of pseudomorphic Al _{0.32} Ga _{0.68} As/In _{0.15} Ga _{0.85} As/GaAs high electron mobility transistor structures. Applied Physics Letters, 1993, 63, 1417-1419.	1.5	34

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55	Room Temperature Commensurate Charge Density Wave in Epitaxial Strained TiTe_2 Multilayer Films. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801850.	1.9	34
56	Band alignment at the $\text{La}_2\text{Hf}_2\text{O}_7/\text{Si}(001)$ interface. <i>Applied Physics Letters</i> , 2006, 88, 202903.	1.5	31
57	Direct Observation at Room Temperature of the Orthorhombic Weyl Semimetal Phase in Thin Epitaxial MoTe_2 . <i>Advanced Functional Materials</i> , 2018, 28, 1802084.	7.8	31
58	Correlation of Charge Buildup and Stress-Induced Leakage Current in Cerium Oxide Films Grown on Ge (100) Substrates. <i>IEEE Transactions on Electron Devices</i> , 2009, 56, 399-407.	1.6	29
59	Impurity diffusion, point defect engineering, and surface/interface passivation in germanium. <i>Annalen Der Physik</i> , 2012, 524, 123-132.	0.9	29
60	Germanium metal-insulator-semiconductor capacitors with rare earth La_2O_3 gate dielectric. <i>Microelectronic Engineering</i> , 2007, 84, 2324-2327.	1.1	28
61	Stabilization of a very high- k tetragonal ZrO_2 phase by direct doping with germanium. <i>Microelectronic Engineering</i> , 2009, 86, 1626-1628.	1.1	27
62	Cu vapor-assisted formation of nanostructured Mo_2C electrocatalysts via direct chemical conversion of Mo surface for efficient hydrogen evolution reaction applications. <i>Applied Surface Science</i> , 2020, 510, 145516.	3.1	27
63	Direct versus reverse vertical two-dimensional $\text{Mo}_2\text{C}/\text{graphene}$ heterostructures for enhanced hydrogen evolution reaction electrocatalysis. <i>Nanotechnology</i> , 2019, 30, 415404.	1.3	26
64	Current Transport Mechanism in High- $\hat{\nu}$ Cerium Oxide Gate Dielectrics Grown on Germanium Substrates. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, H165.	2.2	24
65	Silicene on metal substrates: A first-principles study on the emergence of a hierarchy of honeycomb structures. <i>Applied Surface Science</i> , 2014, 291, 93-97.	3.1	24
66	X-ray absorption study of the growth of Y_2O_3 on $\text{Si}(001)$. <i>Physical Review B</i> , 2005, 71, .	1.1	23
67	Rare earth oxides as high- k dielectrics for Ge based MOS devices: An electrical study of $\text{Pt}/\text{Gd}_2\text{O}_3/\text{Ge}$ capacitors. <i>Solid-State Electronics</i> , 2007, 51, 164-169.	0.8	23
68	Gate stack dielectric degradation of rare-earth oxides grown on high mobility Ge substrates. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	23
69	Germanium diffusion during HfO_2 growth on Ge by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2006, 89, 122906.	1.5	22
70	Total Dose Response of Ge MOS Capacitors With $\text{HfO}_2/\text{Dy}_2\text{O}_3$ Gate Stacks. <i>IEEE Transactions on Nuclear Science</i> , 2007, 54, 971-974.	1.2	22
71	Reliability aspects of ferroelectric $\text{TiN}/\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2/\text{Ge}$ capacitors grown by plasma assisted atomic oxygen deposition. <i>Applied Physics Letters</i> , 2020, 117, 212905.	1.5	22
72	Supercurrent transport and quasiparticle interference in a mesoscopic two-dimensional electron gas coupled to superconductors. <i>Physica B: Condensed Matter</i> , 1994, 203, 285-290.	1.3	21

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73	Germanium FETs and capacitors with rare earth CeO ₂ /HfO ₂ gates. Solid-State Electronics, 2007, 51, 1508-1514.	0.8	21
74	Germanium surface and interfaces (Invited Paper). Microelectronic Engineering, 2009, 86, 1577-1581.	1.1	21
75	Photoreflectance measurement of strain in epitaxial GaAs on silicon. Journal of Applied Physics, 1990, 67, 4389-4392.	1.1	20
76	Electric field dependence of interband transitions in In _{0.53} Ga _{0.47} As/In _{0.52} Al _{0.48} As single quantum wells by room-temperature electrotransmittance. Journal of Applied Physics, 1992, 72, 1912-1917.	1.1	20
77	Anomalous charge trapping dynamics in cerium oxide grown on germanium substrate. Journal of Applied Physics, 2008, 103, 064514.	1.1	20
78	Chemical stability of lanthanum germanate passivating layer on Ge upon high-k deposition: A photoemission study on the role of La in the interface chemistry. Journal of Applied Physics, 2010, 108, 064115.	1.1	20
79	Depletion induced depolarization field in Hf _{1-x} Zr _x O ₂ metal-ferroelectric-semiconductor capacitors on germanium. Applied Physics Letters, 2020, 116, .	1.5	19
80	Anisotropic Thermal Conductivity of Crystalline Layered SnSe ₂ . Nano Letters, 2021, 21, 9172-9179.	4.5	19
81	Interface trap density in amorphous La ₂ Hf ₂ O ₇ /SiO ₂ high- ϵ_r gate stacks on Si. Applied Physics A: Materials Science and Processing, 2005, 80, 253-257.	1.1	18
82	Impact of germanium surface passivation on the leakage current of shallow planar μ n junctions. Materials Science in Semiconductor Processing, 2006, 9, 716-720.	1.9	18
83	Determining weak Fermi-level pinning in MOS devices by conductance and capacitance analysis and application to GaAs MOS devices. Solid-State Electronics, 2007, 51, 1101-1108.	0.8	18
84	AB stacked few layer graphene growth by chemical vapor deposition on single crystal Rh(1 1 1) and electronic structure characterization. Applied Surface Science, 2016, 369, 251-256.	3.1	17
85	Post deposition annealing studies of lanthanum aluminate and ceria high-k dielectrics on germanium. Microelectronics Reliability, 2007, 47, 532-535.	0.9	16
86	Beneficial effect of La on band offsets in Ge/high- ϵ_r insulator structures with GeO ₂ and La ₂ O ₃ interlayers. Applied Physics Letters, 2008, 93, 102115.	1.5	16
87	Surface-Enhanced Raman Spectroscopy of Graphene Integrated in Plasmonic Silicon Platforms with Three-Dimensional Nanotopography. Journal of Physical Chemistry C, 2019, 123, 3076-3087.	1.5	16
88	Alloy clustering and defect structure in the molecular beam epitaxy of In _{0.53} Ga _{0.47} As on silicon. Journal of Materials Research, 1992, 7, 2194-2204.	1.2	15
89	Interband transitions in In _x Ga _{1-x} As/In _{0.52} Al _{0.48} As single quantum wells studied by room-temperature modulation spectroscopy. Physical Review B, 1993, 47, 7198-7207.	1.1	15
90	Electrical Properties of Atomic-Beam Deposited GeO _{1-x} N _x •HfO ₂ Gate Stacks on Ge. Journal of the Electrochemical Society, 2006, 153, G1112.	1.3	15

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91	Atomic scale mechanism for the Ge-induced stabilization of the tetragonal, very high- $\hat{\rho}$, phase of ZrO ₂ . Applied Physics Letters, 2011, 99, .	1.5	15
92	Defect configurations of high-k cations in germanium. Journal of Applied Physics, 2012, 111, 023714.	1.1	15
93	Barrier-induced enhancement of Andreev reflection for minority-spin quasiparticles in ferromagnetic metal/insulator/superconductor ballistic junctions. Physical Review B, 2000, 61, 9729-9733.	1.1	14
94	Ge volatilization products in high-k gate dielectrics. Microelectronic Engineering, 2011, 88, 427-430.	1.1	14
95	ELECTRICALLY ACTIVE INTERFACE AND BULK SEMICONDUCTOR DEFECTS IN HIGH-K / GERMANIUM STRUCTURES. , 2006, , 237-248.		14
96	Electron density effects in the modulation spectroscopy of strained and lattice-matched InGaAs/InAlAs/InP high-electron-mobility transistor structures. Journal of Applied Physics, 1996, 80, 3484-3487.	1.1	13
97	In-situ MBE Si as passivating interlayer on GaAs for HfO ₂ MOSCAPs: effect of GaAs surface reconstruction. Microelectronic Engineering, 2007, 84, 2142-2145.	1.1	13
98	Investigation of voltage dependent relaxation, charge trapping, and stress induced leakage current effects in HfO ₂ /Dy ₂ O ₃ gate stacks grown on Ge (100) substrates. Journal of Vacuum Science & Technology B, 2009, 27, 439-442.	1.3	13
99	Structural and electrical properties of HfO ₂ /Dy ₂ O ₃ gate stacks on Ge substrates. Thin Solid Films, 2010, 518, 3964-3971.	0.8	13
100	Graphene by one-step chemical vapor deposition from ferrocene vapors: Properties and electrochemical evaluation. Journal of Applied Physics, 2016, 119, .	1.1	13
101	Boosting visible light harvesting and charge separation in surface modified TiO ₂ photonic crystal catalysts with CoO _x nanoclusters. Materials Advances, 2020, 1, 2310-2322.	2.6	13
102	Layer-by-layer assembled graphene coatings on polyurethane films as He permeation barrier. Progress in Organic Coatings, 2021, 150, 105984.	1.9	13
103	Ultrafast Spin-Charge Conversion at SnBi ₂ Te ₄ /Co Topological Insulator Interfaces Probed by Terahertz Emission Spectroscopy. Advanced Optical Materials, 2022, 10, .	3.6	13
104	Lanthanum germanate as dielectric for scaled Germanium metal-oxide-semiconductor devices. Microelectronic Engineering, 2009, 86, 1635-1637.	1.1	12
105	Experimental investigation of metallic thin film modification of nickel substrates for chemical vapor deposition growth of single layer graphene at low temperature. Applied Surface Science, 2016, 385, 554-561.	3.1	12
106	Interaction of oxygen vacancies in yttrium germanates. Physical Chemistry Chemical Physics, 2012, 14, 14630.	1.3	11
107	Graphene Quantum Dot-TiO ₂ Photonic Crystal Films for Photocatalytic Applications. Nanomaterials, 2020, 10, 2566.	1.9	11
108	Advanced Photocatalysts Based on Reduced Nanographene Oxide-TiO ₂ Photonic Crystal Films. Materials, 2019, 12, 2518.	1.3	10

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109	Atmospheric pressure plasma directed assembly during photoresist removal: A new route to micro and nano pattern formation. <i>Micro and Nano Engineering</i> , 2019, 3, 15-21.	1.4	10
110	Magnetic skyrmion manipulation in CrTe ₂ /WTe ₂ 2D van der Waals heterostructure. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	10
111	Hf _{>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub>-Based Germanium Ferroelectric p-FETs for Nonvolatile Memory Applications. <i>ACS Applied Electronic Materials</i>, 2022, 4, 2815-2821.}	2.0	10
112	Photoluminescence studies of modulation-doped strained multiple quantum wells. <i>Journal of Crystal Growth</i> , 1995, 152, 28-33.	0.7	9
113	Current Challenges in Ge MOS Technology. <i>ECS Transactions</i> , 2006, 3, 371-384.	0.3	9
114	Metal-oxide-semiconductor devices on p-type Ge with La _{[sub 2]O[sub 3]} and ZrO _{[sub 2]/La[sub 2]O[sub 3]} as gate dielectric and the effect of postmetallization anneal. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 246.	1.3	9
115	SILC decay in La ₂ O ₃ gate dielectrics grown on Ge substrates subjected to constant voltage stress. <i>Solid-State Electronics</i> , 2010, 54, 979-984.	0.8	9
116	Interaction of metal impurities with native oxygen defects in GeO ₂ . <i>Microelectronic Engineering</i> , 2013, 104, 37-41.	1.1	9
117	Type-III Dirac fermions in Hf _x Zr _{1-x} Te ₂ topological semimetal candidate. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	9
118	EELS study of oxygen superstructure in epitaxial Y ₂ O ₃ layers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 109, 52-55.	1.7	8
119	Electrical properties of as-grown molecular beam epitaxy high-k gate dielectrics deposited on silicon. <i>Journal of Applied Physics</i> , 2006, 99, 064105.	1.1	8
120	Impact of post deposition annealing in the electrically active traps at the interface between Ge(001) substrates and LaGeO _x films grown by molecular beam deposition. <i>Journal of Applied Physics</i> , 2011, 110, 084504.	1.1	8
121	The effect of Se and Se/Al passivation on the oxidation of Ge. <i>Microelectronic Engineering</i> , 2011, 88, 407-410.	1.1	8
122	Electronic band structure imaging of three layer twisted graphene on single crystal Cu(111). <i>Applied Physics Letters</i> , 2013, 103, 213108.	1.5	8
123	Electrical properties of metal-oxide-silicon structures with LaAlO ₃ as gate oxide. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 109, 94-98.	1.7	7
124	Short minority carrier response time in HfO ₂ /Ge metal-insulator-semiconductor capacitors. <i>Microelectronic Engineering</i> , 2005, 80, 34-37.	1.1	7
125	Space-charge-limited current involving carrier injection into impurity bands of high-k insulators. <i>Applied Physics Letters</i> , 2005, 86, 203506.	1.5	7
126	Study of stress-induced leakage current (SILC) in HfO ₂ /Dy ₂ O ₃ high- κ gate stacks on germanium. <i>Microelectronics Reliability</i> , 2009, 49, 26-31.	0.9	7

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127	High performance n+/p and p+/n germanium diodes at low-temperature activation annealing. Microelectronic Engineering, 2011, 88, 254-261.	1.1	7
128	Heterostructured CoOxâ€“TiO2 Mesoporous/Photonic Crystal Bilayer Films for Enhanced Visible-Light Harvesting and Photocatalysis. Materials, 2020, 13, 4305.	1.3	7
129	Topological surface states in epitaxial <mml:math		

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145	Nanoscale electrical characterization of ultrathin high-k dielectric MOS stacks: A conducting AFM study. <i>Materials Science in Semiconductor Processing</i> , 2008, 11, 250-253.	1.9	3
146	Gate Dielectrics for High Mobility Semiconductors. <i>ECS Transactions</i> , 2008, 16, 295-306.	0.3	3
147	Current instabilities in rare-earth oxides-HfO ₂ gate stacks grown on germanium based metal-oxide-semiconductor devices due to Maxwell-Wagner instabilities and dielectrics relaxation. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011, 29, 01AB06.	0.6	3
148	(Invited) Active Trap Determination at the Interface of Ge and In _{0.53} Ga _{0.47} as Substrates with Dielectric Layers. <i>ECS Transactions</i> , 2011, 41, 203-221.	0.3	3
149	The Role of Interface Defect States in n- and p-Type Ge Metal-Ferroelectric-Semiconductor Structures with Hf _{0.5} Zr _{0.5} O ₂ Ferroelectric. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000500.	0.8	3
150	Structural study of In _x Ga _{1-x} P/GaAs interfaces grown by MOMBE. <i>Semiconductor Science and Technology</i> , 1992, 7, A127-A130.	1.0	2
151	Materials interfaces in flip chip interconnects for optical components; performance and degradation mechanisms. <i>Microelectronics Reliability</i> , 1998, 38, 1307-1312.	0.9	2
152	Rare Earth Oxides Grown by Molecular Beam Epitaxy for Ultimate Scaling. , 0, , 379-390.		2
153	Maxwell-Wagner Instabilities and Defects Generation during CVS in REO-HfO ₂ Gate Stacks Grown on Germanium Based MOS Devices. <i>ECS Transactions</i> , 2010, 33, 367-374.	0.3	2
154	Room temperature analysis of Ge p+/n diodes reverse characteristics fabricated by platinum assisted dopant activation. <i>Solid-State Electronics</i> , 2013, 81, 19-26.	0.8	2
155	(Invited) Interface Engineering Routes for a Future CMOS Ge-Based Technology. <i>ECS Transactions</i> , 2014, 61, 73-88.	0.3	2
156	Negative Momentum Relaxation Rate and Transport in Polar Semiconductors. <i>Physica Status Solidi (B): Basic Research</i> , 1986, 137, 319-329.	0.7	1
157	Suppression of the kink effect in InGaAs/InAlAs HEMTs grown by MBE by optimizing the InAlAs buffer layer. , 0, , .		1
158	Asymmetric Fabry-Perot p-i-n multiple quantum well optical modulators grown on silicon and GaAs substrates. <i>Superlattices and Microstructures</i> , 1992, 12, 145-149.	1.4	1
159	Electric field dependence of allowed and forbidden transitions in In _{0.53} Ga _{0.47} As/In _{0.52} Al _{0.48} As single quantum wells by room temperature modulation spectroscopy. <i>Applied Surface Science</i> , 1993, 63, 191-196.	3.1	1
160	Materials problems for the development of InGaAs/InAlAs HEMT technology. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1993, 20, 21-25.	1.7	1
161	Optical and transport properties of $\hat{\Gamma}$ -doped pseudomorphic AlGaAs/InGaAs/GaAs structures. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , 1994, 15, 1809-1818.	0.6	1
162	Failure mechanisms of GaAs mesfets with Cu/refractory metallized gates. <i>Microelectronics Reliability</i> , 1997, 37, 1699-1702.	0.9	1

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163	Epitaxial issues and growth morphologies of InAlAs/InGaAs heterostructures on non-(100) InP index substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 87, 249-255.	1.7	1
164	Germanium FETs and capacitors with rare earth CeO ₂ /HfO ₂ gates. , 2006, , .		1
165	Defects Generation under Constant Voltage Stress in La ₂ O ₃ /HfO ₂ Gate Stacks Grown on Ge Substrates. ECS Transactions, 2009, 25, 105-111.	0.3	1
166	Impact of La ₂ O ₃ Thickness on HfO ₂ /La ₂ O ₃ /Ge capacitors and p-channel MOSFETs. , 2009, , .		1
167	SILC decay in Ge-based MOS devices with La ₂ O ₃ gate dielectrics subjected to constant voltage stress. , 2009, , .		1
168	Very High-k Tetragonal ZrO ₂ on Ge with GeO ₂ Passivating Interfacial Layer. ECS Transactions, 2008, 16, 767-772.	0.3	1
169	A Deep-Level Transient Spectroscopy Study of Implanted Ge p+n and n+p Junctions by Pt-Induced Crystallization. ECS Transactions, 2011, 41, 299-308.	0.3	1
170	Ultrathin epitaxial Bi film growth on 2D HfTe ₂ template. Nanotechnology, 2021, 33, .	1.3	1
171	Scaling ferroelectric HZO thickness for low power Ge MFS-FTJ memories. , 2021, , .		1
172	Interfacial roughness and alloy scattering in the InGaAs/InAlAs/InP system grown by ALE and LAMBE. Superlattices and Microstructures, 1991, 9, 467-469.	1.4	0
173	Electron Density Effects in the Modulation Spectroscopy of Strained and Lattice-Matched InGaAs/InAlAs/InP HEMTs.. Materials Research Society Symposia Proceedings, 1995, 406, 301.	0.1	0
174	Transport through a 2DEG channel with superconducting boundaries. Surface Science, 1996, 361-362, 320-323.	0.8	0
175	Enhancement of 2D growth of MBE hetero-structures using laser-assisted MBE techniques. Thin Solid Films, 1998, 318, 22-28.	0.8	0
176	<title>Processing of free-space optical interconnect devices using solder engineering</title>. , 1998, 3288, 262.		0
177	<title>GaAs-on-Si MSM photodetector: FET receiver characterization and reliability</title>. , 1998, 3288, 53.		0
178	Structural Quality And Electrical Behavior Of Epitaxial High- κ Y ₂ O ₃ / Si(001). Materials Research Society Symposia Proceedings, 2002, 745, 9101/T7.10.1.	0.1	0
179	Structural Quality and Electrical Behavior of Epitaxial High-k Y ₂ O ₃ / Si(001). Materials Research Society Symposia Proceedings, 2002, 747, 1.	0.1	0
180	Post-stress/breakdown leakage mechanism in ultrathin high- κ (HfO ₂) _x (SiO ₂) _{1-x} /SiO ₂ gate stacks: A nanoscale conductive-Atomic Force Microscopy C-AFM. Materials Research Society Symposia Proceedings, 2008, 1108, 1.	0.1	0

#	ARTICLE	IF	CITATIONS
181	Metal-induced low temperature activation and $\text{LaO}_2/\text{GeO}_3$ passivation of germanium N^+/P and P^+/N Junctions. , 2009, , .		0
182	Electrical reliability characteristics and dielectrics degradation in gate stacks (REO-HfO_2) grown on the high mobility Ge substrates. , 2011, , .		0
183	EPITAXIAL Y_2O_3 ON Si (001) BY MBE FOR HIGH- k GATE DIELECTRIC APPLICATIONS. , 2001, , .		0
184	Surface-enhanced Raman Spectroscopy of Graphene Integrated in Three-dimensional Nanostructured Plasmonic Silicon Platforms. , 2019, , .		0